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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/806,023

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Igor D.D. Curcio

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EXAMINER

JAKOVAC, RYAN J

ART UNIT

PAPER NUMBER

2445

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,023	<b>Applicant(s)</b> CURCIO ET AL.	
	<b>Examiner</b> RYAN J. JAKOVAC	<b>Art Unit</b> 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,37,43,45-47,51,53,54 and 56-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-9, 37, 43, 45-47, 51, 53-54, 56-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/14/2008</u>  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed 10/14/2008 has been entered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-7, 43, 45-46, 57-61, and 63-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2003/0120802 to Kohno in view of "Optimally Selecting the Parameters of Adaptive Backoff Algorithms for Computer Networks and Multiprocessors" by Peter B. Danzig (hereinafter Danzig.).

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Regarding claim 1, 43, 45-46, 64, 66, and 69-70, the combination of Kohno and Danzig teaches a method, comprising: receiving a backoff-mode attribute, wherein said backoff-mode attribute specifies a backoff mode that provides information on when at least one receiver that did not correctly receive common data sent from a sender to a plurality of receivers in a transmission session can start a request for a repair session (Danzig, pg. 37, the multicast sender transmits a timeout to the recipients. The multicast recipients use the timeout as their backoff interval.), in which repair session at least parts of said common data are transmitted from a repair server to said at least one receiver requesting said repair session, and starting a request for said repair session according to said backoff mode specified by said backoff-mode attribute (Kohno, [0071-0078], [0096-[0110], retransmission requests (i.e. indicating a need for a repair session) are sent to the server. The server responds with the appropriate repair packets.).

It would have been obvious to one of ordinary skill in the art at the time of invention to combine sending the multicast attribute to a plurality of receivers as taught by Danzig with the method of Kohno in order to prevent buffer overflow at the sender and to reduce multicast latency (Danzig, pg. 13, 37.).

Regarding claim 2, 57, the combination of Kohno and Danzig teaches the method according to claim 1, wherein said backoff-mode attribute is communicated before or during the establishment of said transmission session (Danzig, pg. 37, the multicast sender transmits a timeout to the recipients. The multicast recipients use the timeout as their backoff interval.).

Regarding claim 4, 58, the combination of Kohno and Danzig teaches the method according to claim 1, wherein said common data is transmitted from said sender to said plurality of receivers at least partially over an Internet Protocol based network (Kohno, fig. 1, IP network.).

Regarding claim 5, 59, the combination of Kohno and Danzig teaches the method according to claim 1, wherein said common data is transmitted from said sender to said plurality of receivers in a broadcast or multicast operation (Danzig, pg. 37, multicasting to receivers.).

Regarding claim 6, 60, the combination of Kohno and Danzig teaches the method according to claim 1, wherein said common data is streaming data or non-streaming data (Kohno, [0005], streaming data.).

Regarding claim 7, 61, the combination of Kohno and Danzig teaches the method according to claim 1, wherein said common data is real-time data or non-real-time data (Kohno, [0068-0069].).

Regarding claim 63, 65, 67-68, the combination of Kohno and Danzig teaches the apparatus according to claim 46. Danzig in pg. 37-39 discloses the calculation of multicast timeout intervals. It would have been obvious to one of ordinary skill in the art at the time of invention to use an interval that was randomized with uniform distribution (i.e. wherein said information provided by said backoff mode defines an interval in which said at least one receiver

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starts said request for said repair session randomized with uniform distribution) with the combination of Kohno and Danzig, since this is an obvious variation of a time interval. See *KSR v. Teleflex*, 550 U.S. \_\_\_, 127 S. Ct. 1727, 82 U.S.P.Q.2d 1385 (2007).

4. Claims 8-9, 37, 51, 53-54, 56 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Kohno in view of Danzig and further in view of Applicant's Admitted Prior Art (hereinafter AAPA).

Regarding claims 8, 9, 51, 54, 62, the combination of Kohno and Danzig teaches the method according to claim 8. AAPA teaches wherein said wireless network is a mobile network that at least partially implements a Multimedia Broadcast/Multicast Service as defined by a Third Generation Partnership Project (Specification, page 1, paragraph 4 discloses transmission of data over radio (i.e. wireless network) in a MBMS as defined by 3GPP.).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to combine wherein said wireless network is a mobile network that at least partially implements a Multimedia Broadcast/Multicast Service as defined by a Third Generation Partnership Project as taught by AAPA with the method of the combination of Kohno and Danzig in order to provide flexible and efficient mechanisms to send common information from one sender to multiple receivers (AAPA, paragraph [0002]).

Regarding claim 37, 53, 56, the combination of Kohno and Danzig teaches the method according to claim 1. AAPA teaches wherein said transmission of said common data from said

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sender to said plurality of receivers is at least partially controlled by the File Delivery Over Unidirectional Transport protocol (Specification paragraph [0011], FLUTE is used in multicast networks.).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to combine wherein said transmission of said common data from said sender to said plurality of receivers is at least partially controlled by a File Delivery Over Unidirectional Transport FLUTE protocol as taught by applicant's admitted prior art with the method of the combination of Kohno and Danzig in order to send common data from one IP based entity to a plurality of IP based hosts as well as for the delivery of large and small files to many IP based hosts as well as for the delivery of large software updates to many IP based hosts simultaneously (AAPA, paragraph [0011]).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN J. JAKOVAC whose telephone number is (571)270-5003. The examiner can normally be reached on Monday through Friday, 7:30 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RJ/

/Larry D Donaghue/

Primary Examiner, Art Unit 2454